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PTO/SB/05 (11-00)  
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**UTILITY PATENT APPLICATION TRANSMITTAL**  
(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 42390.P11430  
(maximum 12 characters)

First Named Inventor Qing Ma

Title: APPARATUS FOR ADJUSTING THE RESONANCE FREQUENCY OF A MICROELECTROMECHANICAL (MEMS) RESONATOR USING TENSILE/COMPRESSIVE STRAIN AND APPLICATIONS THEREOF

Express Mail Label No. EL431685403US

ADDRESS TO: **Assistant Commissioner for Patents**  
**Box Patent Application**  
**Washington, D. C. 20231**

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ **Fee Transmittal Form (e.g., PTO/SB/17)**  
(Submit an original, and a duplicate for fee processing)
2. ☐ **Applicant Claims Small Entity Status. (37 CFR 1.27)**
3. ☒ **Specification (Total Pages 31)**  
(preferred arrangement set forth below)
  - Descriptive Title of the Invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference sequence listing, a table,  
or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ **Drawings(s) (35 USC 113) (Total Sheets 22)**
5. ☐ **Oath or Declaration (Total Pages     )**
  - a. ☐ Newly Executed (Original or Copy)
  - b. ☐ Copy from a Prior Application (37 CFR 1.63(d))  
(for Continuation/Divisional with Box 17 completed)
    - i. ☐ **DELETIONS OF INVENTOR(S)** Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
  - c. ☐ Unsigned.
6. ☐ **Application Data Sheet. (37 CFR 1.76)**
7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. ☐ Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statement verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers (cover sheet & documents(s))**
10. ☐ a. Separate 37 CFR 3.73(b) Statement (where there is an assignee)
- ☐ b. Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ a. Information Disclosure Statement (IDS)/PTO-1449
- ☐ b. Copies of IDS Citations
13. ☐ **Preliminary Amendment**
14. ☒ **Return Receipt Postcard (MPEP 503) (Should be specifically itemized)**
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ **Request and Certification under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.**
17. ☒ Other: Certificate of mailing with copy of return postcard signed by attorney

**18A. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:**

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)  
Of Prior Application No.: \_\_\_\_\_ Examiner \_\_\_\_\_ Group Art Unit \_\_\_\_\_

(which is a ☐ continuation/ ☐ divisional/ ☐ CIP of prior application no. \_\_\_\_\_,  
which is a ☐ continuation/ ☐ divisional/ ☐ CIP of prior application no. \_\_\_\_\_) (List entire chain of priority)

**For CONTINUATION AND DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**18B. Statement under 37 CFR 3.73(b) for continuing application:**

The undersigned states that \_\_\_\_\_ (name of assignee) is  
the assignee of the entire right, title, and interest in the accompanying patent application by virtue of an  
assignment recorded in the Patent and Trademark Office at Reel. No. \_\_\_\_\_ Frame No. \_\_\_\_\_  
(or a copy of which is attached).

**19. Correspondence Address**

☐ Customer Number or Bar Code Label \_\_\_\_\_  
or \_\_\_\_\_ (Insert Customer No. or Attach Bar Code Label here)

☒ Correspondence Address Below

NAME Chun M. Ng

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Seventh Floor

CITY Los Angeles STATE California ZIP CODE 90025-1026

Country U.S.A. TELEPHONE (425) 827-8600 FAX (425) 827-5644

Name (PRINT/TYPE): Chun M. Ng Registration No.: 36,878

Signature: [Signature] Date: 6/14/01

Our Reference: 042390.P11430

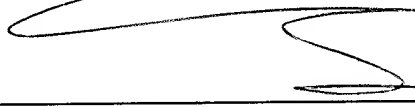
Patent

APPARATUS FOR ADJUSTING THE RESONANCE FREQUENCY OF A  
MICROELECTROMECHANICAL (MEMS) RESONATOR USING  
TENSILE/COMPRESSIVE STRAIN AND APPLICATIONS THEREOF

Inventors: Qing Ma and Andy Berlin

Respectfully submitted,

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

  
Chun M. Ng  
Reg. No. 36,878

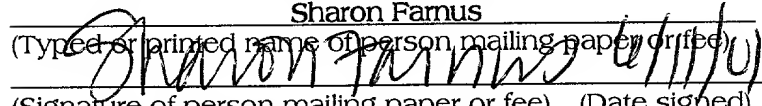
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Date of Deposit: June 11, 2001

I hereby certify that I am causing this paper or fee to be deposited with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated above and that this paper or fee has been addressed to the Assistant Commissioner for Patents, Washington, D. C. 20231

Sharon Farnus

(Typed or printed name of person mailing paper or fee)

  
(Signature of person mailing paper or fee) (Date signed)

Serial/Patent No.: New Application Filing/Issue Date: Herewith  
Client: Intel Corporation  
Title: APPARATUS FOR ADJUSTING THE RESONANCE FREQUENCY OF A MICROELECTROMECHANICAL (MEMS) RESONATOR USING TENSILE/COMPRESSIVE...  
BSTZ File No.: 42390.P11430 Atty/Secty Initials: CMN:sef  
Date Mailed: 6-11-01 Docket Due Date: \*\*\*

The following has been received in the U.S. Patent & Trademark Office on the date stamped hereon:

<input type="checkbox"/> Amendment/Response (____ pgs.)	<input checked="" type="checkbox"/> Express Mail No.: <u>EL431685403US</u>	<input checked="" type="checkbox"/> Check No. <u>1316</u>
<input type="checkbox"/> Appeal Brief (____ pgs.) (in triplicate)	<input type="checkbox"/> _____ Month(s) Extension of Time	Amt: <u>\$1222.00</u>
<input checked="" type="checkbox"/> Application - Utility <u>31</u> pgs., with cover and abstract	<input type="checkbox"/> Information Disclosure Statement & PTO-140 (____ pgs.)	<input type="checkbox"/> Check No. _____
<input type="checkbox"/> Application - Rule 1.53(b) Continuation (____ pgs.)	<input type="checkbox"/> Issue Fee Transmittal	Amt: _____
<input type="checkbox"/> Application - Rule 1.53(b) Divisional (____ pgs.)	<input type="checkbox"/> Notice of Appeal	
<input type="checkbox"/> Application - Rule 1.53(b) CIP (____ pgs.)	<input type="checkbox"/> Petition for Extension of Time	
<input type="checkbox"/> Application - Rule 1.53(d) CPA Transmittal (____ pgs.)	<input type="checkbox"/> Petition for _____	
<input type="checkbox"/> Application - Design (____ pgs.)	<input checked="" type="checkbox"/> Postcard	
<input type="checkbox"/> Application - PCT (____ pgs.)	<input type="checkbox"/> Power of Attorney (____ pgs.)	
<input type="checkbox"/> Application - Provisional (____ pgs.)	<input type="checkbox"/> Preliminary Amendment (____ pgs.)	
<input type="checkbox"/> Assignment and Cover Sheet	<input type="checkbox"/> Reply Brief (____ pgs.)	
<input checked="" type="checkbox"/> Certificate of Mailing	<input type="checkbox"/> Response to Notice of Missing Parts	
<input type="checkbox"/> Declaration & POA (____ pgs.)	<input type="checkbox"/> Small Entity Declaration for Indep. Inventor/Small Business	
<input type="checkbox"/> Disclosure Docs & Oig & Copy of Invents Signed Letter (____ pgs.)	<input type="checkbox"/> Transmittal Letter, in duplicate	
<input checked="" type="checkbox"/> Drawings: <u>22</u> # of sheets includes <u>22</u> figures	<input checked="" type="checkbox"/> Fee Transmittal, in duplicate	

☒ Other: Certificate of mailing with copy of return postcard signed by attorney

## FEE TRANSMITTAL FOR FY 2001

<b>TOTAL AMOUNT OF PAYMENT (\$)</b>	<b>\$1222.00</b>
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**Complete if Known:**

Application No. not yet assigned

Filing Date herewith

First Named Inventor Qing Ma

Group Art Unit	not yet assigned
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Examiner Name not yet assigned

Attorney Docket No. 42390.P11430

**METHOD OF PAYMENT** (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number 02-2666  
Deposit Account Name \_\_\_\_\_

- Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17**

- Applicant claims small entity status. See 37 CFR 1.27**

2.   X   Payment Enclosed:   X   Check  
                      Credit Card  
                      Money Order  
                      Other

## FEE CALCULATION

## 1. BASIC FILING FEE

<u>Large Entity</u>		<u>Small Entity</u>			
<u>Fee</u>	<u>Fee</u>	<u>Fee</u>	<u>Fee</u>		
<u>Code</u>	<u>(\$)</u>	<u>Code</u>	<u>(\$)</u>	<u>Fee Description</u>	<u>Fee Paid</u>
101	710	201	355	Utility application filing fee	710.00
106	320	206	160	Design application filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional application filing fee	

**SUBTOTAL (1)    \$ 710.00**

## 2. EXTRA CLAIM FEES

2. <u>EXTRA CLAIM FEES</u>			<u>Fee from below</u>	<u>Fee Paid</u>
		<u>Extra Claims</u>		
Total Claims	<u>54</u>	- 20** = <u>24</u>	X <u>18.00</u>	= <u>432.00</u>
Independent Claims	<u>4</u>	- 3** = <u>1</u>	X <u>80.00</u>	= <u>80.00</u>
Multiple Dependent				=

**\*\*Or number previously paid, if greater; For Reissues, see below.**

<u>Large Entity</u>		<u>Small Entity</u>		
Fee	Fee	Fee	Fee	
Code	(\$)	Code	(\$)	<u>Fee Description</u>
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2) \$ 512.00**

**FEE CALCULATION (continued)**

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for ex parte reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	For filing a submission after final rejection (see 37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (see 37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
195	300	195	300	Publication fee for early, voluntary, or normal publication	
196	300	196	300	Publication fee for republication	
194	130	194	130	Request for voluntary publication or republication	
098	130	098	130	Processing fee under 37 CFR 1.17(i)	
091	1,240	091	1,240	Acceptance of unintentionally delayed claim for priority	

Other fee (specify) \_\_\_\_\_

Other fee (specify) \_\_\_\_\_

**SUBTOTAL (3) \$ 0.00**

\*Reduced by Basic Filing Fee Paid

#### SUBMITTED BY:

Typed or Printed Name: Chun M. Ng

Signature:  Date: 6/11/01

Reg. Number: 36,878 Telephone Number: 425-827-8600

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